Town of Fort Myers Beach
Agenda Item Summary

Blue Sheet Number: 2010-065

1. Requested Motion: Meeting Date:

Motion to approve the new Inter-local Agreement for Estero Island Beach Restoration to include the payment by the Town of \$110,224 as full payment for its portion of the project, contingent upon agreement by Lee County that it will take actions to rescind all prior easements as requested by property owners and to cover the cost of the same, also contingent upon Lee County validating in written form that the existing DEP permit contains language requiring the County to monitor, assess and correct any negative impacts resulting from the installation of the groin and to designate the above named project as a Town Sponsored Project not requiring the issuance of a Town Permit.

## Why the action is necessary:

To provide a means to work cooperatively with Lee County in correcting the severe beach erosion affecting the north end of the Town's beach, including the areas fronting the County's Bowditch and Lynn Hall parks.

## What the action accomplishes:

This will enable the beach re-nourishment project to move forward, thereby correcting the severe erosion in the area that has been a detriment to the public's use and enjoyment of the beach areas.

_ Resolution _ Ordinance _ Other	_ Council _ Town Staff _ Town Attorney
	_ _ Ordinance

# 6. Alternative Action:

Instruct the Town Manager to issue a permit pursuant to language in section 14-3(b)

# 7. Management Recommendations:

Approve the recommended motion and enable the project to move forward.

# 8. Recommended Approval:

Town Manager	Town Attorney	Finance Director	Public Works Director	Community Development Director	Cultural Resources Director	Town Clerk
(3)						

9.	Council	Action:

_ Approved	_ Denied	_Deferred	_Other
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FMB Town Council May 17, 2010

Beach Renourishment

# MOTION by Mandel, second by Raymond

- Town will cooperate with the county navigational project with town approval; County pays for a consultant
- Town to pay \$110,000, and the county will absorb the expense and effort associated with the cancellation of the easements. (County must rescind easements)
- County to provide a bond
- Town Manager will report back on new technology & funding efforts to be used for the remainder of the beach

**VOTE**: Passes 4-1, with Council Member Babcock dissenting.

# INTERLOCAL AGREEMENT FOR ESTERO ISLAND BEACH RESTORATION

This Interlocal Agreement is made and entered into this \_\_\_\_ day of \_\_\_\_\_\_, 2010, by and between LEE COUNTY, a political subdivision of the State of Florida, hereinafter referred to as the "COUNTY" and the TOWN OF FORT MYERS BEACH, a municipal corporation of the State of Florida, hereinafter referred to as the "TOWN."

## WITNESSETH:

WHEREAS, the COUNTY and TOWN previously entered into an Interlocal Agreement for the completion of a project known as Estero Island Beach Restoration Project on April 28, 2009; and

WHEREAS, the COUNTY and TOWN agree that it is impractical to build the entire Federal Shore Protection Project at this time, but that efforts should be made to protect a portion of the eroded shoreline; and

WHEREAS, the COUNTY and TOWN in recognition of their mutually compatible authorities and goals now desire to enter into a new Interlocal Agreement to govern the completion of a smaller portion of the approved federal shore protection project north from Lynn Hall Park; and

WHEREAS, it is in the interest of the public health, safety and welfare of the COUNTY and the FOWN to cooperate in the construction of the Project; and

WHEREAS, the State of Florida has appropriated funding toward Project design, permitting, and construction in accordance with the Beach Erosion Control Program Long Range Plan, as prepared and updated by the Florida Department of Environmental Protection, Bureau of Beaches and Coastal Systems;

**NOW THEREFORE**, in consideration of the foregoing and the mutual covenants contained herein, the COUNTY and the TOWN agree as follows:

#### SECTION ONE: PURPOSE AND SCOPE

- A. The purpose of this Agreement is to define the obligations of the TOWN and the COUNTY and to provide a local funding mechanism for the completion of the Project. All terms and conditions of this Agreement will be interpreted in a manner consistent with and in furtherance of the purpose as set forth in this Section.
- B. The Scope of Project will be the initiation and prosecution to completion of the Project, consisting of the placement of sand along approximately 1.1 miles of Estero Island generally north of the fishing pier and construction of a terminal structure at Bowditch Point, as hereby agreed to between the TOWN and the COUNTY, and subject to all required permits. The Project includes permitting, easement transactions, design, engineering and construction activities and will also include maintenance and monitoring as required by the existing permits. The Project will be constructed in accordance with all local, state and federal permitting rules, regulations, approvals and permits.
- C. BY entering into this Agreement, the COUNTY and TOWN agree that the Interlocal Agreement for the Estero Island Beach Restoration Project entered into on April 28, 2009 is cancelled in its entirety without penalty to either party.

#### SECTION TWO: OBLIGATIONS OF THE TOWN

Under the terms of this Agreement, the TOWN will:

- A. Assist the COUNTY in acquisition of temporary construction easements necessary to construct the Project.
- B. Prior to COUNTY advertisement for construction bids, notify property owners that have previously granted easements for the Estero Island Federal Shore

Protection Project that those easements are no longer required and will be released upon written request to the COUNTY.

- C. Timely provide or exempt this Project from any TOWN permits necessary for the construction of the Project after plans, applications, drawings or specifications are properly submitted to the appropriate TOWN officials. The TOWN will pay for any required TOWN permits.
- D. Provide funding for the project based on an allocation of costs in accordance with Section Four of this Agreement.
- E. Establish a designated Project funding account in the amount of \$110,224 dollars which shall represent the estimated total amount of the TOWN's share of the project, and shall include but not be limited to cost overruns, future costs of monitoring and any and all other costs currently contemplated or to be contemplated in the future with regard to this Project. If Project construction phase costs are such that this amount is insufficient to cover the TOWN'S share of the costs as calculated in Section FOUR herein, the TOWN and the COUNTY will have thirty (30) days following submittal of the anticipated total Project costs as described in 3(G) below to mutually decide if the Project will go forward and how the additional costs will be allocated. Either party shall have the ability within that thirty (30) day period to advise the other, in writing, that it does not wish to proceed with the Project under this situation, at which time this Agreement shall be deemed null and void and of no effect, without penalty to either party.
- F. Within twenty (20) days of receipt of an invoice from the County containing sufficient documentation to verify Project expenses, provide payment to the COUNTY for reimbursement of the TOWN'S share of Project costs as calculated

according to Section FOUR below and subject to the limitation set forth in Subparagraph TWO (E) above.

G. Work with the COUNTY and property owners in the area to define a planting plan that meets the intent of the comprehensive plans of the COUNTY and TOWN and protects the rights of the property owners. Post-construction maintenance of beach vegetation on private property will be the responsibility of the TOWN and property owners in accordance with the Town of Fort Myers Beach Nourishment Vegetation Management Plan.

H. All cost records and accounts shall be subject to audit by representative(s) of either COUNTY or TOWN, at their election at any time.

## SECTION THREE: OBLIGATIONS OF THE COUNTY

Under the terms of this Agreement, the COUNTY will:

- A. Prepare detailed plans, specifications and a general program outlining the order, rate of prosecution and method of accomplishing the Project.
- B. Apply for and obtain the necessary permits to construct the Project.
- C. Acquire interests in land, easements and rights-of-way as required by law and as necessary to construct the Project.
- D. Provide the TOWN a list of property owners that have previously granted easements for the Estero Island Federal Shore Protection Project and release any such property owner from said previously-signed easements upon written request from the property owner, received by the County within thirty (30) days of the TOWN notification provided under subparagraph 2(B) above.
- E. Consult with the TOWN regarding the specific timing of permit required maintenance and monitoring and notify the TOWN at least thirty (30) days prior to commencing any Project work, including permit-required maintenance.

- F. Secure bids for all work to be performed by contract, in accordance with COUNTY procurement policy. The COUNTY Project Manager shall consult with the TOWN during each stage of the project.
- G. Prior to County Commission approval of the award of construction contract(s), submit to the TOWN, a tabulation of all bids received, a recommendation of award and a statement certifying the anticipated total Project costs, sources of funds and total cost sharing in an updated projection summary. This action shall commence the parties' rights to proceed with the Project or terminate this agreement, as set forth in Section TWO (E) above.
- H. Act as Project Manager for the Project.
- I. Quarterly, in conjunction with submittals to the Florida Department of Environmental Protection, prepare and submit to the TOWN invoices, including documentation of Project expenses owed by the TOWN in accordance with Section Four below and Section Two above.
- J. Provide to the TOWN at least monthly engineering inspection and progress reports showing the work completed throughout the initial construction phase of the Project.
- K. Keep books, records, documents and other evidence pertaining to costs and expenses incurred for the construction to the extent and in such detail as will properly reflect total Project costs and funding of the Project. The COUNTY will make available at its office at reasonable times, such books, records, documents and other evidence for inspection and audit by authorized TOWN representatives for a minimum of three years after completion of construction of the Project.
- L. Notify the TOWN of the satisfactory completion of each phase of the Project.

  The COUNTY will provide a certification of Project costs, sources of funds

received for the Project and use of Project funds within sixty (60) days of substantial completion and also within thirty (30) days of final completion of the Project phase.

- M. Maintain those beach accesses, parking areas and other public use facilities already maintained by the COUNTY during the period prior to construction and thereafter, as reasonably permitted in consideration of the public health, safety and welfare. The COUNTY shall use best efforts to maintain and keep open any parking spaces used to calculate the state's share on an equal access basis.
- N. Provide project specific funding based on an allocation of costs in accordance with Section FOUR of this Agreement.

#### SECTION FOUR: COST ALLOCATION

- A. The cost allocation between the TOWN and COUNTY will be based on total Project construction costs, which will be certified by the COUNTY pursuant to Section THREE (L) herein, subject to the limitation on the TOWN's obligation as set forth in Section TWO (E).
- B. The state funding, provided through the Florida Department of Environmental Protection (DEP) is based on the limits of designated critically eroded shoreline, the presence of public access points, and the proximity and number of parking spaces available to the general public on an equal access basis. The details of the funding eligibility are described Chapter 62B-36, Florida Administrative Code, and detailed in DEP Contract 09LE2. The total eligible state funding is known as the State Share.

C. In the event the COUNTY removes any parking spaces listed in 09LE2, Exhibit B

that results in a diminished State Share, the COUNTY will pay 100% of the

unrealized State Share and state reimbursements if applicable.

D. Other project funding provided by entities other than the DEP, COUNTY or

TOWN shall collectively be referred to as Grant Funding.

E. The costs remaining after deduction of the State Share and Grant Funding is

known as the Local Share. Distribution of the Local Share has been identified

with the use of the Estero Island Beach Restoration Project Economic Analysis.

(Economic Analysis) completed for Lee County in July 2000 by Applied

Technology and Management, Inc. The Economic Analysis determined that 12%

of the benefits are for storm protection, and 85% of the benefits are for

recreation.

F. Twelve (12%) percent of the Local Share is attributable to storm protection. The

COUNTY owns approximately 26.5% of the Project shoreline in the form of

beach park facilities known as Lynn Hall Memorial Park and Bowditch Point

Regional Park and will pay the proportional cost for those facilities. Accordingly,

the TOWN will pay 8.8% of the Local Share and the COUNTY will pay 3.2% of

the Local Share on the basis of storm protection and subject to the limitations set

forth in Section TWO, subparagraph (E) above.

The Project shoreline is all publicly accessible as determined by DEP in

accordance with Chapter 62B-36, Florida Administrative Code. Accordingly, the

proportion of the Local Share attributable to recreation will be paid by the

COUNTY and is equal to 88% of the Local Share.

SECTION FIVE:

LIABILITY

- A. The COUNTY shall hold the TOWN harmless from and against any and all liability, actions, claims and damages arising after the commencement of the term of this Interlocal Agreement which may be imposed upon or asserted against the TOWN by reason of the claim of any person for damage(s) to persons or property occurring as the direct result of the COUNTY's negligent acts or omissions as outlined in this Interlocal Agreement. The COUNTY shall not be liable to in any manner, nor be required to hold the TOWN harmless, for any of the TOWN's own negligent acts or omissions.
- B. The TOWN shall hold the COUNTY harmless from and against any and all liability, actions, claims and damages arising after the commencement of the term of this Interlocal Agreement which may be imposed upon or asserted against the COUNTY by reason of the claim of any person for damage(s) to persons or property occurring as the direct result of the TOWN's negligent acts or omissions as outlined in this Interlocal Agreement. The TOWN shall not be liable to in any manner, nor be required to hold the COUNTY harmless, for any of the COUNTY's own negligent acts or omissions.
- C. Notwithstanding the above, as consideration for the nourishment of the beaches by the Project, and upon satisfactory completion of the Project, the TOWN, pursuant to this Agreement, waives any claim for liability for erosion or Project effectiveness and specifically releases the COUNTY from any and all liability that may have accrued as a result of Project completion.
- D. The Parties further agree that by execution of this Interlocal Agreement, no Party will be deemed to have waived its statutory defense of sovereign immunity, or increased its limits of liability as provided for in §768.28, Florida Statutes.

## SECTION SIX: NOTICES

Notices to the respective Parties will be forwarded, in writing, to the following parties or their written designee(s)

Chair, Board of County Commissioners Lee County, Florida P.O. Box 398 Fort Myers, FL 33902

Mayor TOWN of Fort Myers Beach 2523 Estero Boulevard Fort Myers Beach, FI 33931

## **SECTION SEVEN: TERM**

The term of this Agreement will be for eight (8) years from the date of execution, subject to the cancellation provisions as hereinafter enumerated, or upon full performance by the Parties hereto with respect to the terms, conditions, requirements and mutual obligations herein, whichever first occurs. Provided, however, that this Agreement may be extended thereafter in writing pursuant to terms and conditions mutually agreeable to the Parties.

# SECTION EIGHT: CANCELLATION OF THE AGREEMENT

- A. Either Party desiring to cancel the Project subject to the provisions of Section TWO, subparagraph (E), must give notice by certified mail.
- B. Either Party may cancel this Agreement for any reason prior to opening of bids for construction by providing thirty (30) days written notice of intention to cancel. Except as stated in Section EIGHT (C) below, any costs incurred with this Project prior to a cancellation will be borne by the Party canceling the Project. If the Agreement is canceled, all other terms and conditions of this

Agreement will be void, except for any conditions necessitated by a permit, which cannot reasonably be modified because it is a requirement of a regulatory permitting agency.

C. Failure to fulfill the obligations as stated herein shall be grounds for cancellation of this Agreement. If the Agreement is canceled, all terms and conditions of this Agreement will be void, except for any conditions necessitated by a permit, which cannot reasonably be modified because it is a requirement of a regulatory permitting agency. Any costs incurred with this project prior to a cancellation will be borne by the Party that failed to meet their obligations.

# **SECTION NINE: AMENDMENTS**

This Agreement may only be amended in writing duly executed by the TOWN and the COUNTY.

IN WITNESS WHEREOF, the TOWN and the COUNTY have executed this Agreement on the day, month, and year first written above.

ATTEST.	TOWN OF FORT WITERS BEACH
By: Michelle Mayher, TOWN Clerk	By: Larry Kiker, Mayor
	APPROVED AS TO FORM:
	By: Anne Dalton, Esquire, TOWN Attorney

ATTEST CHARLIE GREEN, CLERK	BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA
By: Deputy Clerk	By: Tammara Hall, Chair
	APPROVED AS TO FORM
	By:Office of the County Attorney

# Memo

To: Terry Stewart, Town Manager

Through: Dr. Frank Shockey, Community Development Director

From: Keith Laakkonen, Environmental Sciences Coordinator

Date: May 25, 2010

Re: Terminal groin

Based upon our discussion and per your direction, I have prepared this memo regarding the proposed terminal groin associated with the beach nourishment project. The design and the intent of terminal groin is to minimize and control down-drift sediment losses and beach erosion by catching sand along the shoreline. Terminal groins are often constructed at the down-drift end of a beach to reduce the amount of sand loss to an inlet or pass. When terminal groins are constructed as part of a beach nourishment project, they greatly increase the longevity of the nourishment, reduce the need for additional nourishment projects, and increase the amount of storm protection in the affected area of shoreline.

The Florida Department of Environmental Protection (DEP) and the US Army Corps of Engineers (USACE) has a very thorough permitting process for any coastal project, including beach nourishment projects. This same permitting process evaluates any structures constructed on a beach or shoreline. During this permitting process scientists and engineers evaluate the designs and require sufficient supporting evidence and extensive engineering (including modeling) for any project. The DEP and USACE evaluate the designs and determine if any alternatives exist or if any modifications may be implemented to increase the efficacy of the project and reduce the possibility of deleterious impacts to the shoreline. The DEP even requires a "contingency plan" in the permit that can be implemented if any unanticipated shoreline impacts occur from the groin or nourishment. The requirement for the contingency plan is described in special condition 7 of the DEP permit. There are also extensive requirement for monitoring to "include specific monitoring to assess the effects of the excavation of the borrow areas and construction of the terminal groin structure on erosion and accretion patterns within the fill placement area and adjacent shorelines and on the inlet littoral system in order to identify any adverse impacts attributable to the project authorized by this permit". The DEP permit also stipulates that "As guidance for obtaining Departmental approval, the Plan shall acknowledge that there is a potential for adjacent shoreline erosion occurring as a result of the construction of the proposed terminal groin on the north end of Estero Island..." This acknowledgement of possible negative effects with a groin is basically a statement from the DEP to the applicant that they are aware that groins accrete sand on the up-drift side and may cause slight erosion on the down-drift side. This is typical for any permit that the DEP issues with any structure (e.g. a groin) associated with it. The DEP typically permits very few types of coastal structures however; terminal groins at the end of littoral cells are commonly permitted

around the state, especially in conjunction with a nourishment project to increase project stability. If the DEP had concerns about the groin, they would have required it to be redesigned sometime during permit review or in the eight years the permit has been active. If the DEP has serious concerns about the possibility of significant negative effects from the project, they would not have issued the permit. The groin at Bowditch is designed to keep sand on the beach and prevent it from being lost to the channel. The plan and the permit state that there may be some negative effect on the down-drift side of the groin, which is acceptable since this is the location of the federal channel which is critical to keep open and functional. It is my opinion that the design, placement, and monitoring of the groin is the best plan possible.

Any proposed modification to the groin associated with Fort Myers Beach nourishment project would trigger the DEP and USACE permit process again and require supporting evidence and extensive engineering (including modeling). This permitting process would also require the Florida Fish & Wildlife Conservation Commission and the U.S. Fish & Wildlife Service to evaluate the impacts of a new design on sea turtles and piping plovers. It is important to note that since the approval of the location and design of the groin, the U.S. Fish & Wildlife Service designated the Bowditch point as critical habitat for the federally endangered piping plover. This would mean an extensive evaluation of any the groin and if it would affect the habitat of a federally endangered species. The groin has been evaluated, reviewed, and in the USACE in the General Reevaluation Report (GRR), in 2001. The GRR reduced the length of the groin from 600′ to 240′ and the width was increased to account for a larger design wave height. The 240′ length is what was evaluated and permitted by the DEP. The entire project was revaluated again in 2007 in a study paid for by the Town (Beach Nourishment Plan Review, ATM Inc.) This report also acknowledged the effectiveness of the groin and did not make any suggestions to modify the design.

Terminal groins have been used around the world, the U.S., and Florida for many decades. There is nothing unusual about this particular design compared to any others that I have observed. I have been working on all issues associated with the beach nourishment project since shortly after my hiring in August of 2008. During this time I have spent considerable time and effort working on issues including easements, vegetation, and project design. In February of this year, I attended the 2010 National Conference on Beach Preservation Technology. In October of 2009, I attended the ASBPA 2009 National Coastal Conference: "Integrating Coastal Science & Policy". In these two excellent conferences and in my time working and researching this project, I have yet to find any new technologies or designs for groins that would be appropriate for this particular project. For further information, I have attached a position paper addressing terminal groins from the American Shore & Beach Preservation Association.

I have also evaluated the "Westwall Erosion Protection System". From the literature and from their website, it is my opinion that this is a shoreline hardening system (e.g. a seawall). New seawalls along the Gulf of Mexico are generally prohibited by the DEP and specifically prohibited by Town of Fort Myers Beach Comprehensive Plan Policies 6-E-4 v and 5-D-1 vii. Land Development Code Section 26-77 also prohibits seawalls along the Gulf of Mexico.

# ASBPA Position Paper – April 2008

# **Terminal Groins at Coastal Inlets**

# Prepared by the ASBPA Science & Technology Committee

"Groins are shore-perpendicular structures emplaced for the purpose of either (1) maintaining the beach behind them, or (2) controlling the amount of sand moving alongshore" (Kraus, Hanson, and Blomgren, 1994). A **terminal** groin is the most downcoast structure in a field of groins or a single structure positioned near the end of a littoral cell. This paper addresses only the use of terminal groins at inlets.

Terminal groins are often placed near inlets and sometimes are confused with jetties. The principal purpose of a terminal groin at an inlet is to retain sand on the beach directly updrift of the inlet, whereas the purpose of a jetty is to help maintain navigation channel depth and location by reducing sand movement into the channel. A terminal groin, once filled to capacity, will allow sand moving in the littoral zone to flow past the structure although the terminal groin will still cause some reduction in the net movement of sand at its location.

ASBPA supports the National Academy of Science position on the appropriate use of terminal groins:

Agencies with proscriptive laws, regulations, and management plans for the shore should modify them to allow the use of fixed structures in conjunction with beach nourishment projects where project performance can be significantly improved, out-of-project negative effects are acceptably small or can be mitigated as necessary, and beach access or use is not impaired, all with due considerations for costs and environmental impacts. Each fixed structure used in conjunction with a beach nourishment project should be filled to the upper limit of its holding capacity if its function is to retain sand. When a beach nourishment project is not maintained, the adverse effects of any structures should be mitigated or the structures removed. [NRC 1995, pp. 11-12 emphasis added]

Beaches adjacent to tidal inlets are often subject to accelerated erosion and much larger scale fluctuations in the shoreline compared with beaches away from inlets. Terminal groins placed at inlets can limit the loss of sand into the inlet and moderate large-scale fluctuations of the shoreline near the inlet. Many coastal inlets have shoal systems that can hold significant quantities of sand, sometimes in the millions of cubic yards. When the channel (thalweg) migrates, the location of the ebb-tidal shoal also changes causing wave patterns around the inlet to change and often significant movement of the ocean shoreline position. Homes, roads and infrastructure can be damaged or destroyed if the result of this process is severe erosion. Terminal groins can control the position of the shoreline in these cases, thereby avoiding or considerably reducing damages caused by these processes.

It is recognized that inlet delta systems are natural conduits for bypassing sand from updrift to downdrift shores and that a terminal groin will reduce the amount of sand entering the inlet by reducing transport from the updrift shore. At locations where such sand reduction results in measurable erosion of downdrift shores, mitigation in the form of sand placement may be needed to protect structures on the downdrift beach. However, in most cases the size and the trapping capacity of the inlet shoals are orders of magnitude larger than the trapping capacity of properly designed terminal groins, making the effects of sand reduction caused by the groin undetectable.

Terminal groins should be designed to be the smallest possible length and elevation that will hold the updrift beach profile in place considering the range of littoral drift reversals that are possible at the inlet. The terminal groin should be long enough to maintain enough sand up-drift of the groin to establish the desired storm protective beach profile and in addition be able to hold an extra amount of sand in anticipation of drift reversals that would otherwise temporarily expose homes and infrastructure to storm damage.

Sand should be placed along the beaches updrift of the terminal groin to reduce or eliminate the amount of sand captured by the groin. Ideally the amount of sand placed should equal the amount of updrift beach accretion that otherwise would be expected to be caused by the groin.

At locations where the inlet shoreline position may be eroded by the loss of sand, as a result of installing a terminal groin, consideration should be given to making the groin permeable and/or of low-enough profile to allow for movement of sand to the interior shoreline.

The ASBPA concludes that terminal groins can be beneficial to control erosion on nourished and unnourished beaches and reduce losses of sand to coastal inlets. Terminal groins can control large-scale fluctuations of the shoreline and protect homes and infrastructure. Although downdrift and inlet shorelines can be adversely altered by the reduction in sand movement caused by a terminal groin, the overall positive effects of these structures typically outweigh negative effects that can be mitigated by other actions.

ASBPA recognizes there are uncertainties with the installation of any beach stabilization structure. Designs for terminal groins should seek to create a profile tailored to the site of interest that replicates the natural beach (ASCE, 1994). The impact of the structure on downcoast areas should be monitored by means of beach and inlet surveys, and sediment budgets periodically updated for the updrift beach, downdrift beach, and inlet.

#### References

- ASCE. 1994. Coastal Groins and Nearshore Breakwaters. Technical Engineering and Design Guides as Adapted from the US Army Corps of Engineers, No 6, American Society of Civil Engineers, New York, NY, 87 pp.
- Kraus, N.C., Hanson, H., and Blomgren, S. 1994. Modern Functional Design of Groins. *Proceedings 24th Coastal Engineering Conference*, American Society of Civil Engineers, 1,327-1,342.
- NRC. 1995. Beach Nourishment and Protection. Committee on Beach Nourishment and Protection, Marine Board, Commission on Engineering and Technical Systems, National Research Council; National Academy Press, National Academy of Sciences, Washington, DC, 334 pp.
- USACE. 2002. Coastal Engineering Manual. U.S. Army Corps of Engineers, Engineer Manual 1110-2-1100, Washington, DC (in 6 volumes).

# **ASBPA Science & Technology Committee:**

Tom Campbell, P.E., Chair, Russ Boudreau, P.E.; Michael Bruno, Ph.D., Robert Dean, Ph.D., Scott Douglass, Ph.D.; Nicole Elko, Ph.D.; Charles Finkl, Ph.D., Tim Kana, Ph.D.; Tony Pratt; Charles Shabica, Ph.D.; Michael Walther, P.E.

#### **About the ASBPA**

Founded in 1926, the American Shore and Beach Preservation Association represents the scientific, technical and political interests along the coast in an effort to shape national research and policy concerning shore and beach management and restoration. The group strives to engage a factual debate on coastal issues and economics that will foster sound, far-sighted and economical development and preservation of our beaches; thereby aiding in placing their benefits within the reach of the largest possible number of people in accordance with the ideals of a democratic nation.

The ASBPA recognizes that the shores, beaches and other coastal resources of America provide important quality-of-life assets within the reach of the largest possible number of people in accordance with the ideals of a democratic nation. We pursue this mission by means of:

- Protecting and improving healthy and diverse recreational opportunities.
- Managing, protecting and enhancing environmental resources.
- Encouraging responsible and sustainable economic development.
- Preserving aesthetic values.
- Reducing damage from natural hazards and human activities.
- · Mitigating human impacts to natural processes.

This association is dedicated to preserving, protecting and enhancing the beaches, shores and other coastal resources of America.



#### **BOARD OF COUNTY COMMISSIONERS**

TOWN OF FORT WYERS BEACH

Bob Janes District One

RECEIVED BY

A. Brian Bigelow District Two

Ray Judah District Three May 1, 2009

Tammy Hall District Four Mayor Larry Kiker Town of Fort Myers Beach 2523 Estero Boulevard

Frank Mann District Five

Fort Myers Beach, Florida 33931

Donald D. Stilwell County Manager

David M. Owen County Attorney

RE: Fort Myers Beach Renourishment

Diana M. Parker County Hearing Examiner

Interlocal Agreement

Dear Mayor Kiker,

Enclosed please find one original of the referenced agreement which was approved by the County Commission on April 28, 2009, has been fully executed by the County and is being returned for your records.

Sincerely,

Stephen Boutelle

Marine Operations Manager

Lee County Natural Resources Division

Enclosure: Interlocal Agreement (one executed original)

# INTERLOCAL AGREEMENT FOR ESTERO ISLAND BEACH RESTORATION

This Interlocal Agreement is made and entered into this \_28\_ day of April, 2009, by and between LEE COUNTY, a political subdivision of the State of Florida, hereinafter referred to as the "COUNTY" and the TOWN OF FORT MYERS BEACH, a municipal corporation of the State of Florida, hereinafter referred to as the "TOWN."

# WITNESSETH:

WHEREAS, the COUNTY, pursuant to §161.25, Florida Statutes, has the authority to develop and execute plans for beach and shore preservation; and

WHEREAS, the TOWN, the State of Florida Department of Environmental Protection, the U.S. Army Corps of Engineers, and the COUNTY have worked cooperatively in developing a plan for the placement of sand on the shores of Estero Island ("Project"); and

WHEREAS, Lee County Comprehensive Plan Policy 113.3.1(2) requires that the County coordinate with local municipalities in preparing beach and dune management plans; and

WHEREAS, Lee County Comprehensive Plan Policy 113.3.1(8) requires that the County's beach and dune management program includes preparation of a sand conservation plan emphasizing the importance of maintaining beach quality sand within the littoral system; and

WHEREAS, Lee County Comprehensive Plan Policy 113.3.1(9) requires that the County coordinate with the TOWN such beach renourishment activities as are appropriate for the Estero Island segment of the Federal Shore Protection Project; and

CO 2

WHEREAS, the COUNTY is required by Lee County Comprehensive Plan Policy 113.3.1(9) to be the local sponsor for the Federal Shore Protection Project and, as such, will be the local sponsor for this Project; and

WHEREAS, the COUNTY is required by Lee County Comprehensive Plan Policy 113.3.1: to have its Division of Natural Resources Management, or successor agency, to be responsible for the beach and dune management program, with the program to include, inter alia, pursuing all available sources of funding, to specifically include state and federal funding, for implementation of beach and dune projects; and

WHEREAS, the .COUNTY is required by Lee County Comprehensive Plan Policy 113.3.1(11) to install dune vegetation as a component of all County funded renourishment projects; and

WHEREAS, the Town of Fort Myers Beach Comprehensive Plan Policy 5-DE-1(i) states that beach renourishment will be necessary for much of Estero Island and requires the TOWN to work closely with the COUNTY to complete this important work; and

WHEREAS, the Town of Fort Myers Beach Comprehensive Plan Policies 5-D-1(ii) and 6-E-3(i) require the Town to restore dunes wherever they have been removed or destroyed; and

WHEREAS, it is in the interest of the public health, safety and welfare of the COUNTY and the Town to cooperate in the construction of the Project; and

WHEREAS, the State of Florida has appropriated funding toward Project design, permitting, and construction in accordance with the Beach Erosion Control Program

Long Range Plan, as prepared and updated by the Florida Department of Environmental Protection, Bureau of Beaches and Coastal Systems; and

WHEREAS, the project is a federally authorized shore protection project, eligible for funding through the United States Army Corps of Engineers; and

WHEREAS, Lee COUNTY has been provided funding from Tourist Development Tax revenues for beach nourishment.

NOW THEREFORE, in consideration of the foregoing and the mutual covenants contained herein, the COUNTY and the TOWN agree as follows.

# SECTION ONE: PURPOSE AND SCOPE

- A. The purpose of this Agreement is to define the obligations of the TOWN and the COUNTY and to provide a local funding mechanism for the completion of the Project. All terms and conditions of this Agreement will be interpreted in a manner consistent with and in furtherance of the purpose as set forth in this Section.
- B. The Scope of Project will be the initiation and prosecution to completion of the Project, consisting of the placement of sand along approximately 4.6 miles of Estero Island and construction of a terminal structure at Bowditch Point, as hereby agreed to between the TOWN and the COUNTY, and subject to all required permits. The Project includes permitting, design, engineering and construction activities and will also include maintenance and monitoring as required by the existing permits. The Project will be constructed in accordance with all local, state and federal permitting rules, regulations, approvals and permits.

# SECTION TWO: OBLIGATIONS OF THE TOWN

Under the terms of this Agreement, the TOWN will:

- A. Assist the COUNTY in acquisition of the necessary interests in land, easements and rights-of-way as required by law and as mutually determined by the TOWN and the COUNTY to be necessary to construct the Project. This specifically includes easements approved by the Army Corps of Engineers. However, neither party will obtain such interest by purchase or the exercise of eminent domain powers.
- B. Maintain those beach access parking areas and other public use facilities already maintained by the TOWN during the period prior to construction and thereafter, as reasonably permitted in consideration of the public health, safety and welfare. The TOWN shall use best efforts to maintain and keep open any parking spaces used to calculate the state's cost share on an equal access basis. This specifically includes discontinuance of any existing parking program that provides TOWN citizens or any other defined group with the potential to park at locations referenced in state cost sharing agreements via a mechanism or prices different from that available to the general public, other than a program required by federal or state statutes or regulations, such as handicapped parking access. Further, no such program shall be established for the term of this agreement. Should the TOWN's failure to maintain the beach access parking areas described in SECTION FOUR (E) herein result in a reduction of the state funding share, the TOWN shall pay 100% of the unrealized state share and state

- reimbursement and will not be subject to the limitations set forth in SECTION TWO (F) below.
- C. Where reasonably possible, exempt this Project from any TOWN permits necessary for the construction of the Project after plans, applications, drawings or specifications are properly submitted and approved by the appropriate TOWN officials. The TOWN will pay for any remaining required TOWN permits.
- D. Cooperate with the COUNTY in the procurement of grants for the Project.
- E. Provide funding for the project based on an allocation of costs in accordance with Section Four of this Agreement.
- F. Establish a designated Project funding account in the amount of one million (\$1,000,000.00) dollars which shall represent the maximum not-to-exceed amount of the TOWN's share of the total project, and shall include but not be limited to cost overruns, future costs of monitoring and any and all other costs currently contemplated or to be contemplated in the future with regard to this Project. If all cost share estimates (except for the parking costs set forth in Section Four (E)) are such that this maximum amount is insufficient to cover the TOWN'S share of the costs as calculated in Section FOUR herein, the TOWN and the COUNTY will have thirty (30) days following the date of TOWN's receipt of construction bid tabs and other related information from the COUNTY as set forth in Section THREE (I) below to mutually decide if the Project will go forward and how the additional costs will be allocated. Either party shall have the ability within that thirty (30) day period to advise the other, in writing, that it does not wish to proceed with the Project under this situation, at which time this

Agreement shall be deemed null and void and of no effect, without penalty to either party, and neither party shall be responsible for payment of any costs incurred by the other party (or on the part of a third party on such other party's behalf) with regard to this Project.

- G. Within twenty (20) days of receipt of an invoice from the County containing sufficient documentation to verify Project expenses, provide payment to the COUNTY for reimbursement of the TOWN'S share of Project costs as calculated according to Section FOUR below and subject to the limitation set forth in Subparagraph TWO (F) above.
- H. Prior to Project bidding, prepare and submit for COUNTY approval a planting plan to be implemented by the TOWN as part of the Project. This planting plan must meet the intent of Lee County and Town of Fort Myers Beach Comprehensive Plans.
- I. All cost records and accounts shall be subject to audit by representative(s) of either COUNTY or TOWN, at their election at any time.

#### SECTION THREE: OBLIGATIONS OF THE COUNTY

Under the terms of this Agreement, the COUNTY will:

- A. Prepare detailed plans, specifications and a general program outlining the order, rate of prosecution and method of accomplishing the Project.
- B. Apply for and obtain the necessary permits to construct the Project.
- C. Attempt to acquire necessary interests in land, easements and rights-of-way with TOWN assistance as required by law and as mutually determined by the TOWN and the COUNTY to be necessary to construct the Project. This specifically

includes easements approved by the Army Corps of Engineers. However, neither party will obtain such interest by purchase or the exercise of eminent domain powers.

- D. Reduce the term of any previously-signed easements for this Project from perpetual or fifty (50) years to a ten (10) year term, with such term to commence upon issuance of a Notice to Proceed with the Project. If the Notice to Proceed with the Project has not been issued by December 31, 2010, the ten (10) year term easements shall be null and void and shall so state. This reduction shall be made by the COUNTY upon written request by the property owner, received by the COUNTY within thirty (30) days of the approval of this Interlocal Agreement by the TOWN or COUNTY, whichever is later.
- E. Release any property owner from his/her previously-signed easements for this Project, upon written request from the property owner, received by the County within thirty (30) days of the approval of this Interlocal Agreement by the TOWN or County, whichever is later. Prior to the COUNTY's granting such release, the TOWN and the COUNTY will work together cooperatively to meet with those property owners who have provided written requests under this subparagraph, so as to address their concerns cooperatively and ascertain if such property owners would be willing to forego such release.
- F. In the event that this Project is cancelled for any reason, provide the TOWN with a list of all property owners with easements which have not expired or been terminated as of the date of such Project cancellation. The TOWN will have the option to contact such property owners to advise them that they may rescind

such easements upon the TOWN's receipt of a request therefor within forty-five (45) days of such TOWN contact. In the event the TOWN receives such notice(s), the COUNTY shall sign any documents reasonably required to effectuate such rescission, and the TOWN shall pay the costs of recording such rescission.

- G. Consult with the TOWN regarding the specific timing of permit required maintenance and monitoring and notify the TOWN at least thirty (30) days prior to commencing any Project work, including permit-required maintenance.
- H. Secure bids for all work to be performed by contract, in accordance with COUNTY procurement policy. The TOWN shall participate in the selection committees for all competitive negotiation processes related to the Project. The COUNTY Project Manager shall consult with the TOWN during each stage of the project.
- I. Prior to County Commission approval of the award of construction contract(s), submit to the TOWN, a tabulation of all bids received, a recommendation of award and a statement certifying the anticipated total Project costs, sources of funds and total cost sharing in an updated projection summary. This action shall commence the parties' rights to proceed with the Project or terminate this agreement, as set forth in Section TWO (F) above. Upon such award, if any, the COUNTY Project Manager shall submit one (1) complete copy of the executed construction documents to the TOWN.
- J. Act as Project Manager for the Project.

- K. Inform the TOWN in writing of any change in the Project costs, sources of funding for the Project and use of Project funds during prosecution of work on the Project; however, this shall not create any obligation on the part of the TOWN to fund such additional costs above the maximum funding specified herein.
- L. Quarterly, in conjunction with submittals to the Florida Department of Environmental Protection, prepare and submit to the TOWN invoices, including documentation of Project expenses owed by the TOWN in accordance with Section Four below and Section Two above.
- M. Provide to the TOWN at least monthly engineering inspection and progress reports showing the work completed throughout the initial construction phase of the Project.
- N. Keep books, records, documents and other evidence pertaining to costs and expenses incurred for the construction to the extent and in such detail as will properly reflect total Project costs and funding of the Project. The COUNTY will make available at its office at reasonable times, such books, records, documents and other evidence for inspection and audit by authorized TOWN representatives for a minimum of three years after completion of construction of the Project.
- O. Notify the TOWN of the satisfactory completion of each phase of the Project.

  The COUNTY will provide a certification of Project costs, sources of funds received for the Project and use of Project funds within sixty (60) days of substantial completion and also within thirty (30) days of final completion of the Project phase.
- P. Cooperate with the TOWN in the procurement of grants for the Project.

- Q. If grants are awarded for the Project from any source during or after the completion of the Project, upon notification of receipt of such grants for the Project, at the completion of the Project or upon the receipt of grants subsequent to completion, the COUNTY will provide an accounting and distribute such grant monies according to the cost sharing provisions of this Agreement within thirty (30) days.
- R. Maintain those beach accesses, parking areas and other public use facilities already maintained by the COUNTY during the period prior to construction and thereafter, as reasonably permitted in consideration of the public health, safety and welfare. The COUNTY shall use best efforts to maintain and keep open any parking spaces used to calculate the state's share on an equal access basis.
- S. Provide all COUNTY permits as necessary for the construction of the Project after plans, applications, drawings, or specifications are properly submitted and approved by the appropriate COUNTY officials.
- T. Provide project specific funding based on an allocation of costs in accordance with Section FOUR of this Agreement.
- U. COUNTY shall, at the earliest date practicable but in no event more than ninety (90) days following final completion of each Project phase, furnish TOWN with one copy of its final and complete billing of all costs incurred in conjunction with the work performed hereunder, such statement to follow as closely as possible the order of the items contained in the job estimate. The final billing shall show the description and site of the work; the date on which the first work was performed; the date on which the earliest item of billed expense was incurred: the

date on which the last work was performed or the last item of billed expense was incurred; and the location where the records and accounts bill can be audited. Sufficient reference shall be made in the billing to COUNTY records, accounts or other relevant documents.

V. Cooperate with TOWN efforts to identify and implement agreed upon new technologies to minimize the need for future beach nourishment.

#### SECTION FOUR: COST ALLOCATION

- A. The cost allocation between the TOWN and COUNTY will be based on total Project costs, which will be certified by the COUNTY pursuant to Section THREE (O) herein, subject to the limitation on the TOWN's obligation as set forth in Section TWO (F).
- B. Federal participation, including cost sharing, is based on Congressional authorization as provided in the House Resolution dated December 15, 1970 and the Senate Resolution dated December 17, 1970. It is further described in House Document 91-935 and the Lee County, Florida Shore Protection Project General Reevaluation Report with Environmental Impact Statement dated January 200 and revised July 2001 which are the basis for execution of the Federal Project Cooperation Agreement. Federal funding is calculated on a parcel by parcel basis and is dependent upon the easements described in Section TWO (A) and THREE (C) herein. Developed parcels with a federally approved easement are eligible for 65% cost sharing. Recreation areas with a federally approved easement are eligible for 50% cost sharing. Undeveloped private parcels do not qualify for federal cost sharing. The total eligible federal

- funding is known as the Federal Share. The COUNTY will advance all funds necessary to cover the Federal Share.
- C. In the event that the Federal Share is reduced because of the lack of federally approved easements, the unrealized portion of the Federal Share will be cost-shared as part of the Local Share as described herein below, and subject to the limitations set forth in SECTION TWO (F) above.
- D. The state funding, provided through the Florida Department of Environmental Protection (DEP) is based on the limits of designated critically eroded shoreline, the presence of public access points, and the proximity and number of parking spaces available to the general public on an equal access basis. The details of the funding eligibility are described Chapter 62B-36, Florida Administrative Code, and detailed in DEP Contract 99LE1 as amended. The total eligible state funding is known as the State Share.
- E. In the event the TOWN removes any parking spaces listed in 99LE1, Exhibit B that results in a diminished State Share, the TOWN shall pay 100% of the unrealized State Share and state reimbursements if applicable. Any such change will not be subject to the limitations set forth in SECTION TWO (F) above.
- F. In the event the COUNTY removes any parking spaces listed in 99LE1, Exhibit B that results in a diminished State Share, the COUNTY will pay 100% of the unrealized State Share and state reimbursements if applicable.
- G. The costs remaining after deduction of the Federal Share and the State Share is known as the Local Share. Distribution of the Local Share has been identified

with the use of the *Estero Island Beach Restoration Project Economic Analysis*, (Economic Analysis) completed for Lee County in July 2000 by Applied Technology and Management, Inc. The Economic Analysis determined that 12% of the benefits are for storm protection, and 88% of the benefits are for recreation.

- H. Twelve (12%) percent of the Local Share is attributable to storm protection and will be paid by the TOWN subject to the limitations set forth in Section TWO, subparagraph (F) above.
- I. The proportion of the Local Share attributable to recreation will be paid by the COUNTY for all publicly accessible shorelines as determined by DEP in accordance with Chapter 62B-36, Florida Administrative Code. The TOWN will pay the proportion of the Local Share attributable to recreation for all remaining shoreline, subject to the limitations set forth in Section TWO, subparagraph (F) above. It is further agreed that this will be a value calculated for the overall project based on the percentage of accessible shoreline as determined by DEP. Based upon DEP Agreement 99LE1-Amendment 8, this results in a COUNTY obligation of 80.47% of the Local Share and a TOWN obligation of 7.52% of the Local Share. The TOWN's obligation hereunder is subject to the limitations set forth in Section TWO, subparagraph (F) above.
- J. In the event that the Federal Share is reduced for reasons other than easements, the TOWN and COUNTY will cooperatively seek additional state funding in an effort to reduce the Local Share.

SECTION FIVE: LIABILITY

- A. The COUNTY shall hold the TOWN harmless from and against any and all liability, actions, claims and damages arising after the commencement of the term of this Interlocal Agreement which may be imposed upon or asserted against the TOWN by reason of the claim of any person for damage(s) to persons or property occurring as the direct result of the COUNTY's negligent acts or omissions as outlined in this Interlocal Agreement. The COUNTY shall not be liable to in any manner, nor be required to hold the TOWN harmless, for any of the TOWN's own negligent acts or omissions.
- B. The TOWN shall hold the COUNTY harmless from and against any and all liability, actions, claims and damages arising after the commencement of the term of this Interlocal Agreement which may be imposed upon or asserted against the COUNTY by reason of the claim of any person for damage(s) to persons or property occurring as the direct result of the TOWN's negligent acts or omissions as outlined in this Interlocal Agreement. The TOWN shall not be liable to in any manner, nor be required to hold the COUNTY harmless, for any of the COUNTY's own negligent acts or omissions.
- C. Notwithstanding the above, as consideration for the nourishment of the beaches by the Project, and upon satisfactory completion of the Project, the TOWN, pursuant to this Agreement, waives any claim for liability for erosion or Project effectiveness and specifically releases the COUNTY from any and all liability that may have accrued as a result of Project completion.

D. The Parties further agree that by execution of this Interlocal Agreement, no Party will be deemed to have waived its statutory defense of sovereign immunity, or increased its limits of liability as provided for in §768.28, Florida Statutes.

SECTION SIX: NOTICES

Notices to the respective Parties will be forwarded, in writing, to the following parties or their written designee(s)

Chair, Board of County Commissioners Lee County, Florida P.O. Box 398 Fort Myers, FL 33902

Mayor TOWN of Fort Myers Beach 2523 Estero Boulevard Fort Myers Beach, FI 33931

**SECTION SEVEN: TERM** 

The term of this Agreement will be for ten (10) years from the date of execution, subject to the cancellation provisions as hereinafter enumerated, or upon full performance by the Parties hereto with respect to the terms, conditions, requirements and mutual obligations herein, whichever first occurs. Provided, however, that this Agreement may be extended thereafter in writing pursuant to terms and conditions mutually agreeable to the Parties.

#### SECTION EIGHT: CANCELLATION OF THE AGREEMENT

- A. Either Party desiring to cancel the Project must give notice by certified mail.
- B. Either Party may cancel this Agreement for any reason prior to the COUNTY's scheduled date for opening of bids for construction by providing

thirty (30) days written notice of intention to cancel. Any costs incurred with this Project prior to such cancellation will be shared as specified in Section FOUR (H) and (I) above. If the Agreement is canceled, all other terms and conditions of this Agreement will be void, except for any conditions necessitated by a permit, which cannot reasonably be modified because it is a requirement of a regulatory permitting agency.

- C. Either party may cancel this Agreement between the time of the County's scheduled date for opening of bids for construction and the time of the award of the construction bid, in accordance with the provisions set forth in Section TWO (F) above.
- D. Except as otherwise set forth in this Agreement, if the Agreement is canceled, all terms and conditions of this Agreement will be void, except for any conditions necessitated by a permit, which cannot reasonably be modified because it is a requirement of a regulatory permitting agency. Except as otherwise set forth in this Agreement, any costs incurred with this project prior to a cancellation will be borne by the Party that failed to meet its obligations.
- E. If this Agreement is cancelled, the TOWN and COUNTY agree to cooperate to transfer all existing Project permits to the TOWN when allowed by the agency that issued the permit, upon the TOWN's written request.

#### SECTION NINE: AMENDMENTS

This Agreement may only be amended in writing duly executed by the TOWN and the COUNTY.

IN WITNESS WHEREOF, the TOWN and the COUNTY have executed this Agreement on the day, month, and year first written above.

ATTEST:

Michelle Mayher, TOWN Clerk

TOWN OF FORT MYERS BEACH

By:

Larry Kiker, Mayor

APPROVED AS TO FORM:

By:

Anne Dalton, Esquire, TOWN Attorney

**ATTEST** CHARLIE GREEN, CLERK

Deputy Clerk

**BOARD OF COUNTY COMMISSIONERS** OF LEE COUNTY, FLORIDA

By: Ray Judah, Chair

APPROVED AS TO FORM

By:

Office of the County Attorney

